Pleistocene Rancholabrean Large Mammalian Fauna from Aransas River, San Patricio County, Texas

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This study examines the paleoenvironment of the Pleistocene Rancholabrean (210,000 – 11,000 years ago) large mammalian fauna from the Aransas River, San Patricio County, Texas based on the 1925 Dr. Mark Francis and 1940 and 1941 Work Projects Administration collections located in Austin, Texas. The purpose of this investigation is to determine the temperature range, fauna diversity and genus or species current range. The fossils were measured, photographed, and identified. Identification of the fossils was made with reference to the modern collection and suggestions from laboratory specialists. According to a recent study, the predicted range of climate change by 2050 will place 15% to 35% of the 1,103 species studied at risk of extinction. My study showed 52.5% of the 40 genera or species present at this locality are currently extinct. I estimate the Aransas River area temperature during the Pleistocene Rancholabrean to range from approximately 15.5°C (60°F) to 25°C (77°F), while currently the temperatures ranges from 3.8°C (39°F) to 35.5°C (96°F). My temperature is based upon the current temperature range of the fauna. The Aransas River collections revealed that of the 40 different genera or species 67.5% were plains animals, 15% were riparian dwelling, and 17.5% were aquatic or semi aquatic, where as the closely located Ingleside and Nueces River sites had a faunal mix that was comprised of 88% plains animals and 12% riparian dwelling. Judging from the above studies, the study area was once and still is a water source for the region.

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